



**PHYSIOTEC BLOGPOST FEB 2019**

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## ***Physical Activity and Pregnancy: The Facts, the Figures and the False conceptions***

If you are pregnant or planning a pregnancy and you are unsure about the current guidelines for physical activity and what is safe, this is a must read! An excellent team of experts have appraised over 27,000 manuscripts and abstracts (Davies G & Artal R., 2019) in order to bring us the most up to date information and guidelines on physical activity during pregnancy.

### **THE FACTS:**

Physical activity during pregnancy:

- DOES NOT increase the risks of structural or functional birth defects which stem from in the womb (Davenport MH, et al., 2019)
- Has a significant effect on reducing the severity of low back pain, pelvic girdle pain and lumbopelvic pain. (Davenport MH, et al., 2019)
- Decreases the chances of using instruments during delivery (Davenport MH, et al., 2019)
- Reduces the chances of depression during pregnancy as well as the severity of symptoms. Unfortunately, this does not apply to the post-natal period. (Davenport MH, et al., 2018)
- Reduces the risk of excessive weight gain during pregnancy as well as weight retention postpartum. (Ruchat S, et al., 2018)
- Results in a small increase in the mother's body temperature which is safe for the baby. (Davenport MH, et al, 2019)
- Effectively reduces the risk of developing gestational diabetes mellitus, gestational hypertension and pre-eclampsia. (Davenport MH, et al., 2018)
- Reduces the odds of having abnormally large babies (Davenport MH, et al., 2018)

Additionally...

- There is no association between physical activity during pregnancy and increased risk of miscarriage or perinatal mortality (stillbirth or deaths in the first week of life) (Davenport MH, et al., 2019)
- There is not enough evidence to inform us if lying on our back to exercise is safe or if it should be avoided altogether during pregnancy (Mottola MF, et al., 2019)
- There was no association found between exercise during pregnancy and complications with the newborn baby or harmful childhood outcomes (Davenport MH, et al., 2018)

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## THE FIGURES & RECOMMENDATIONS

(Mottola MF, et al., 2018)

- An accumulation of **150 minutes of moderate intensity exercise** each week is recommended in order to achieve the health benefits and reduce risks of pregnancy complications
- Exercise over a **minimum of 3 days per week**, however daily exercise is encouraged
- **Variety** is key in order to achieve greater benefits
- **Pelvic floor muscle training** can be performed **daily** in order to reduce risk of urinary incontinence
- **Exercising flat on the back should be modified** if the pregnant woman is experiencing light headedness, nausea or feeling unwell
- **TAKE HOME MESSAGE:** All women WITHOUT contraindications should be participating in physical activity during pregnancy

## THE FALSE CONCEPTIONS

- **Exercise will harm the baby.** The evidence has shown that there are no increased risks of miscarriage or a small baby when undertaking physical activity during pregnancy
- **Heart rate should be below 140 beats per minute.** This is an outdated guideline from the 80s and there was no evidence to even support this guideline, it was based on expert opinion.
- **Exercise needs to be at a gym or with group fitness.** Lots of studies that were looked at were walking programmes. Additionally, moderate intensity physical activity can include gardening, mowing the lawns and some household chores.

### *Other considerations for physical activity and pregnancy*

There are other considerations specific to the mother during pregnancy and physical activity. These include, but are not limited to, the pelvic floor and risk of overload/prolapse as well as pelvic pain. If you are planning a pregnancy/already pregnant and have a history of pelvic pain or pelvic floor concerns, it is important to see your physiotherapist before commencing physical activity. Here at Physiotec, your women's health physiotherapist can assess your pelvic floor muscles to ensure you are using them correctly, assess and address other areas of concern such as low back pain or pelvic pain and advise you on the safest exercises during pregnancy as well as into the post-natal period. You might also like to join one of our Pilates classes to stay strong or build strength and control before, during or after your pregnancy.

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## Who shouldn't exercise?

The absolute and relative contraindications are listed in the table below. Women with absolute contraindications should not undertake any physical activity that is strenuous but may continue their normal daily activities. Women with relative contraindications need to discuss their options with their obstetric care provider.

Absolute Contraindications	Relative Contraindications
<ul style="list-style-type: none"><li>• Ruptured membranes</li><li>• Premature labour</li><li>• Unexplained persistent vaginal bleeding</li><li>• Placenta praevia after 28 weeks gestation</li><li>• Pre-eclampsia</li><li>• Incompetent cervix</li><li>• Intrauterine growth restriction</li><li>• High-order multiple pregnancy (e.g. triplets)</li><li>• Uncontrolled type I diabetes</li><li>• Uncontrolled thyroid disease</li><li>• Other serious cardiovascular, respiratory or systemic disorder</li></ul>	<ul style="list-style-type: none"><li>• Recurrent pregnancy loss</li><li>• Gestational hypertension</li><li>• History of spontaneous preterm birth</li><li>• Mild/moderate cardiovascular or respiratory disease</li><li>• Symptomatic anaemia</li><li>• Malnutrition</li><li>• Eating disorder</li><li>• Twin pregnancy after 28 weeks</li><li>• Other significant medical conditions</li></ul>

[Taken from (Mottola MF, et al., 2018)]

## Other Safety Precautions

There are also safety precautions for pregnant women who are physically active. These precautions are based on expert opinion and are a part of the 2019 Canadian guideline for physical activity throughout pregnancy (Mottola MF, et al., 2018). They include the following:

- ⇒ Avoid scuba diving and physical activities in excessive heat as well as those which involve physical contact or risk of falling (e.g. helmet sports, gymnastics)
- ⇒ A pregnant woman wishing to participate in physical activity at high altitudes (>2500m) must seek supervision/advice from an obstetric care provider with knowledge on the impact of high altitude for both mother and fetus.

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- ⇒ If a pregnant woman wishes to compete at an athletic level or exercise well above the recommended guidelines, it is important they seek advice from an obstetric care provider with knowledge of the impact high intensity physical activity has on both the mother and fetus
- ⇒ Ensure to maintain sufficient nutrition and stay hydrated
- ⇒ Know when to cease physical activity and contact the appropriate and qualified healthcare provider immediately if any of the following occur:
  - Persistent and excessive shortness of breath that doesn't resolve with rest
  - Severe chest pain
  - Regular and painful contractions (of the uterus)
  - Vaginal bleeding
  - Persistent loss of fluid from the vagina which may indicate ruptured membranes
  - Persistent dizziness or faintness that does not resolve on rest

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